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In Vitro Growth of CD4+ Peripheral Blood T Cells  
in Serum-Free Medium

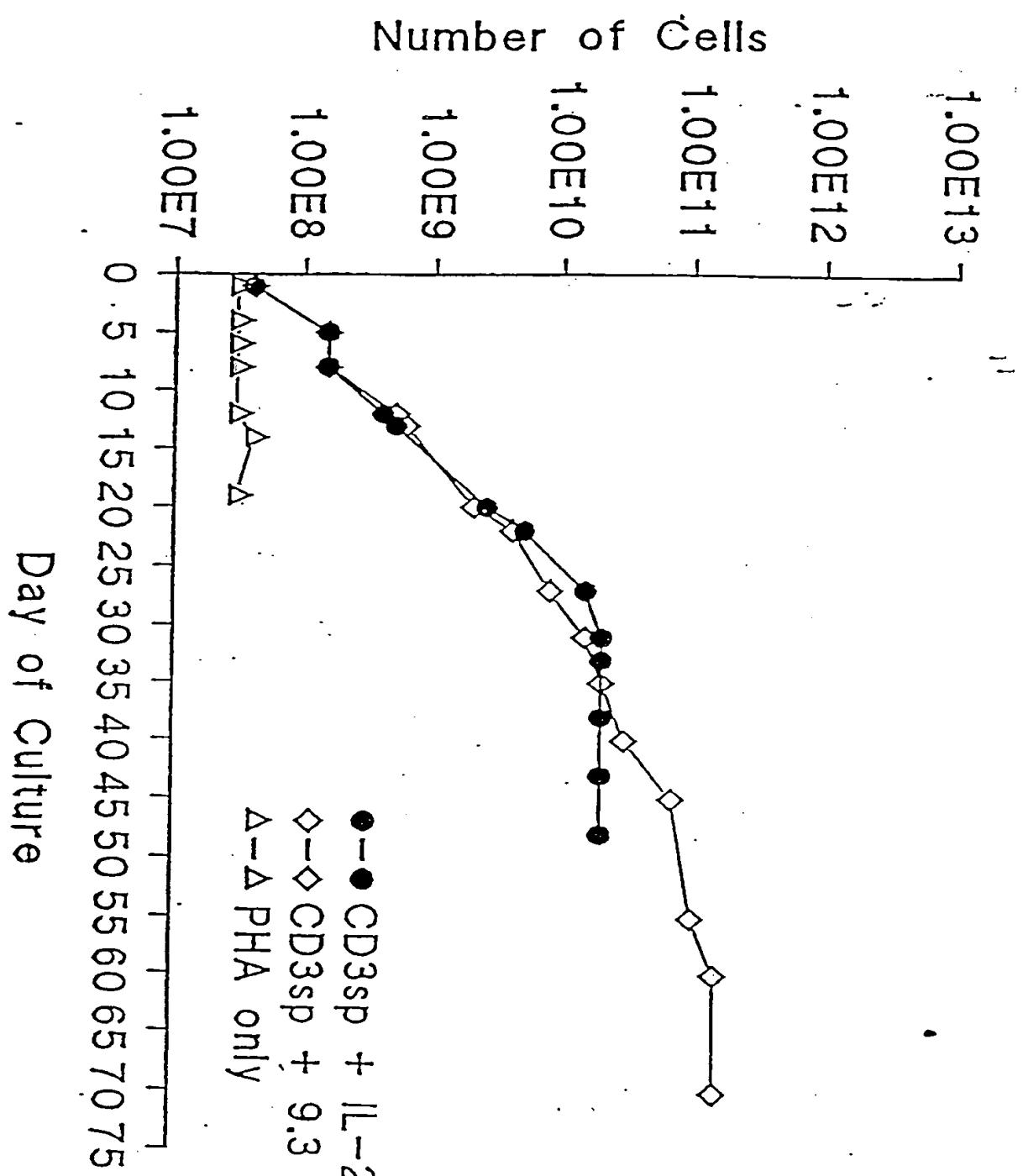


FIG. 1

09350202 070899

GAMMA/DELTA NO. 7

(RPMI w/ 10% FCS)

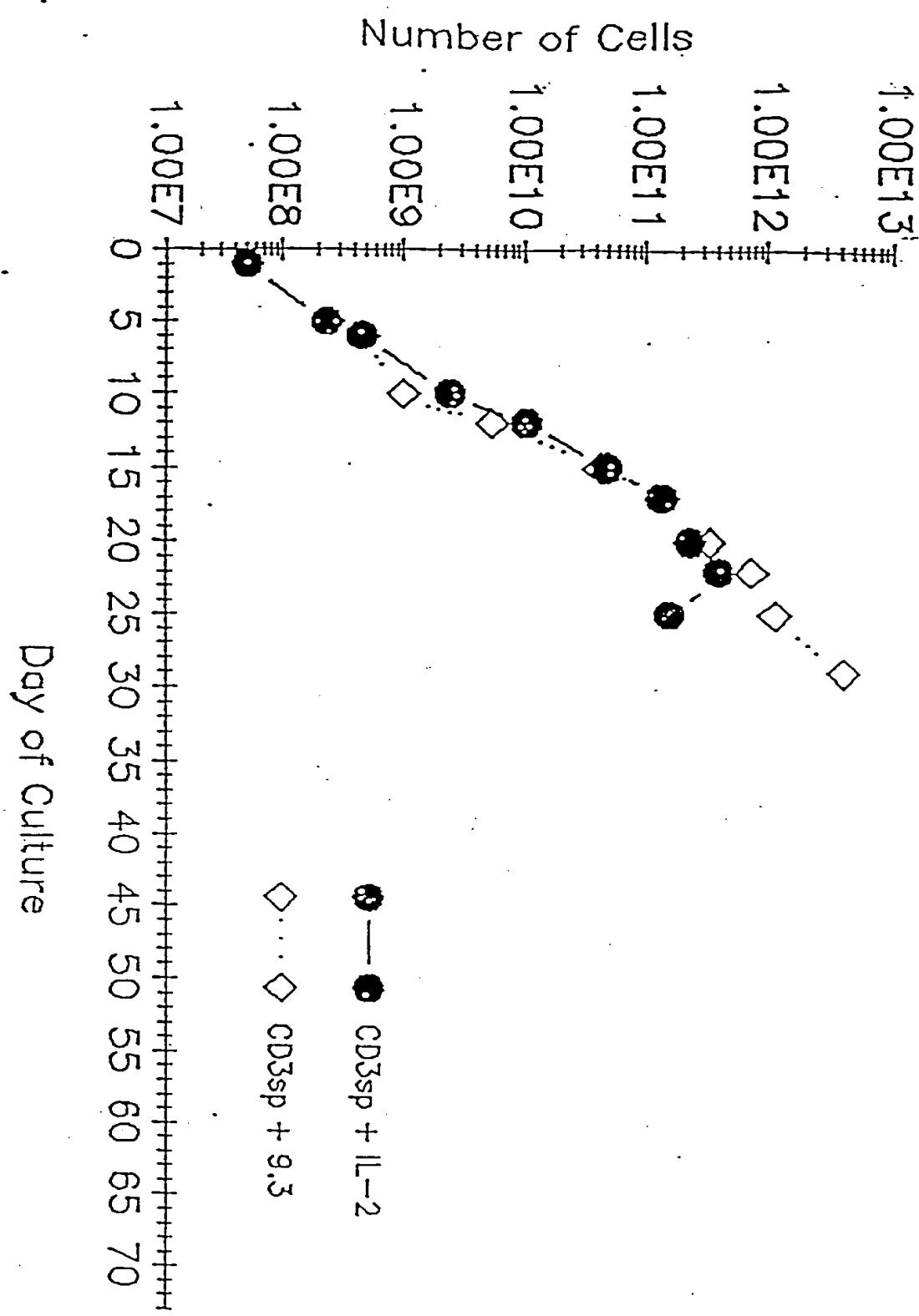


FIG. 2

09350202, 070899

### LT #13: GROWTH CURVES

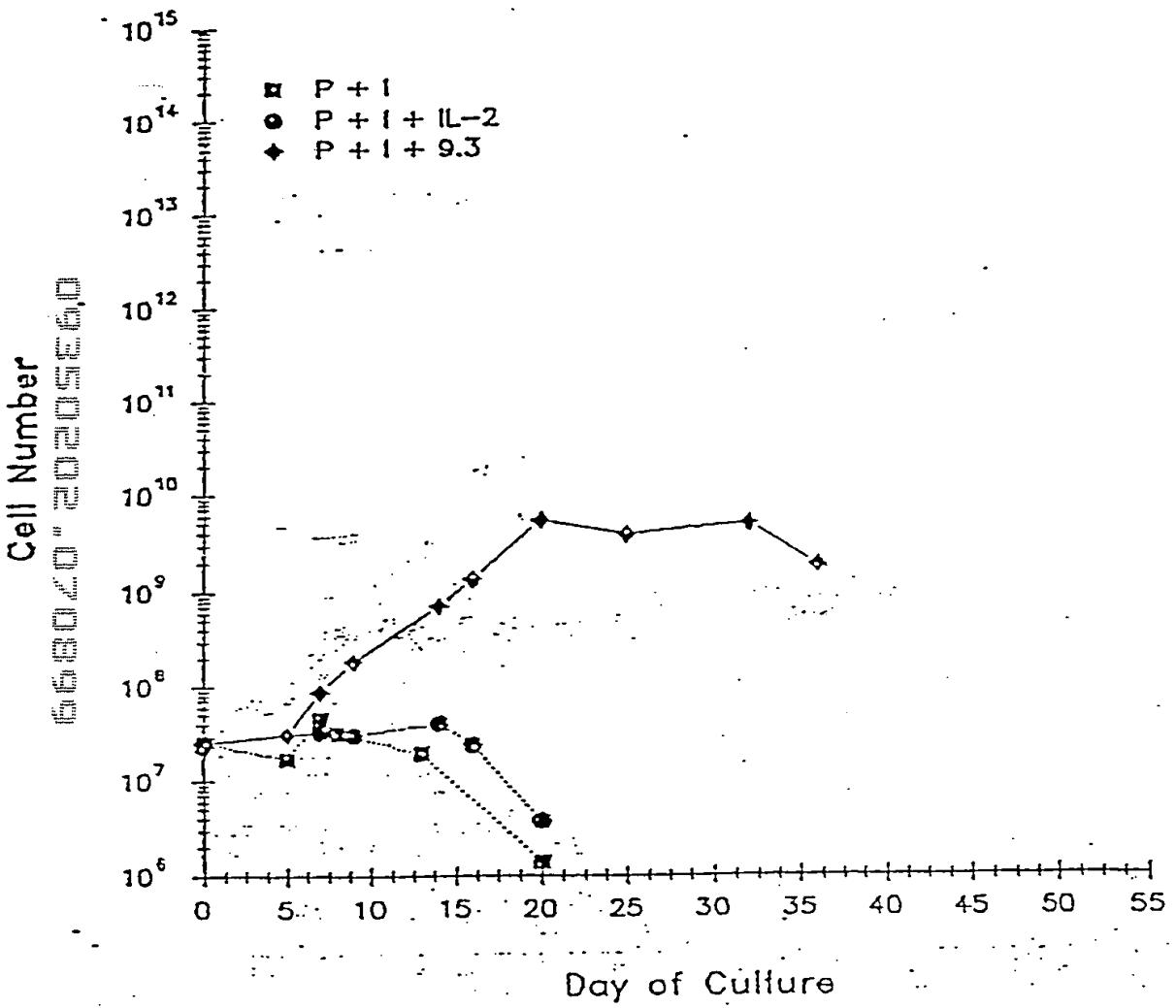
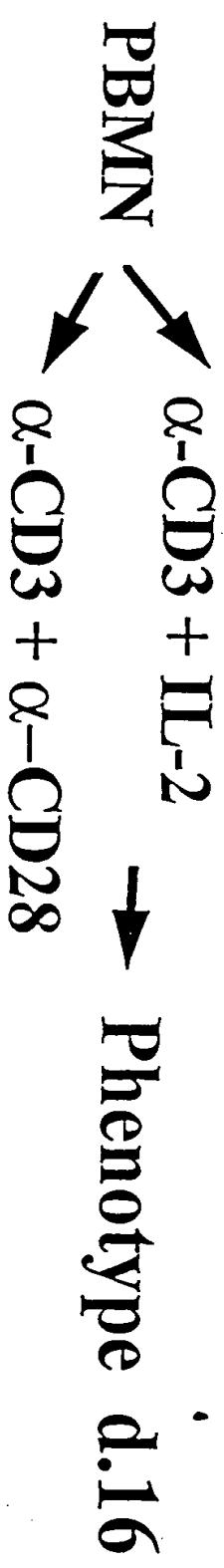


FIG. 3

>Selective Outgrowth of CD4<sup>+</sup> T Cells During  
CD28 Stimulated T Cell Expansion



Culture	Day 0		Day 16	
	CD4	CD8	CD4	CD8
	30.9	13.9		

CD3 + IL-2	8.0	84.5
CD3 + CD28	44.6	52.5

FIG. 4

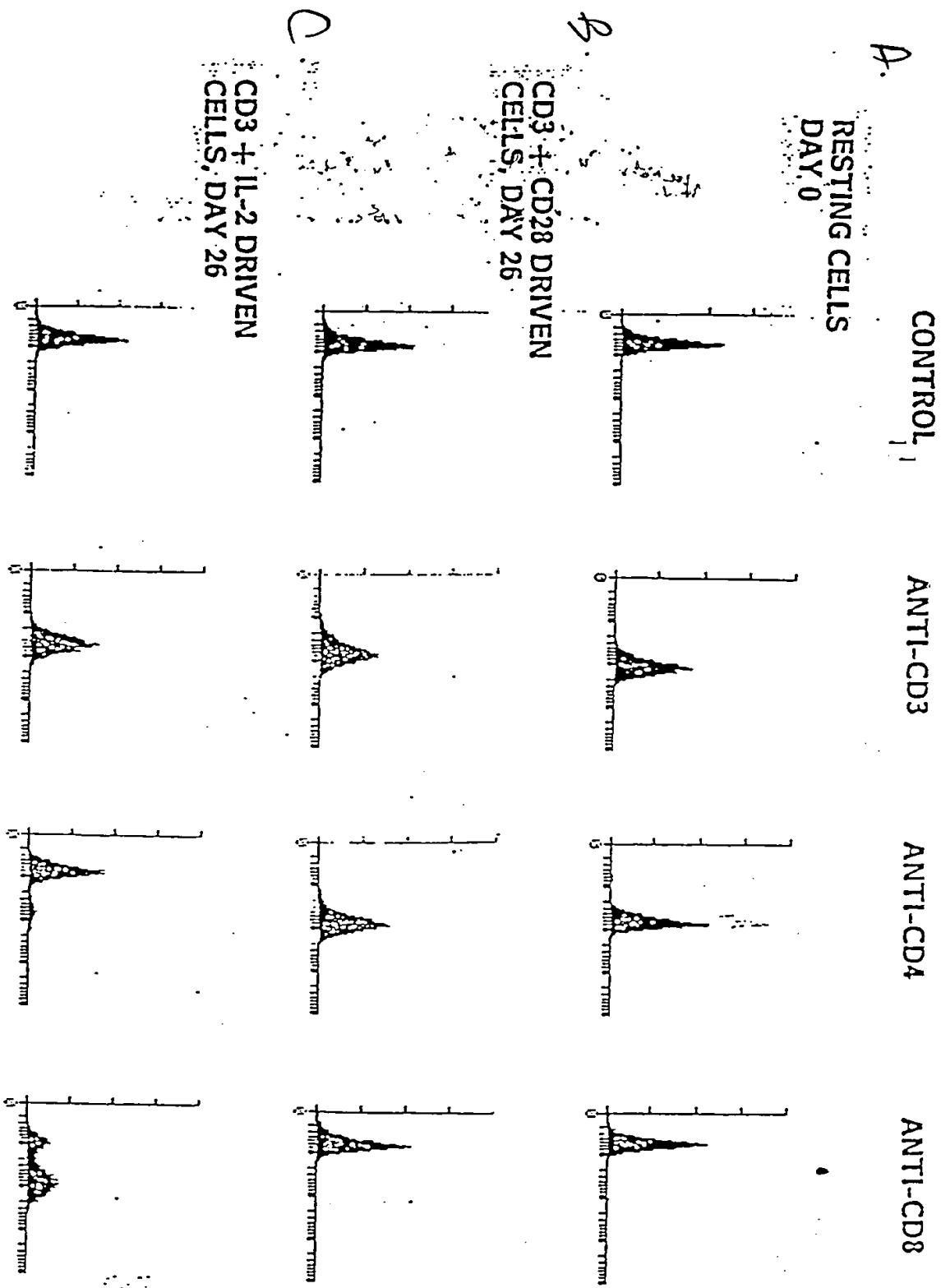
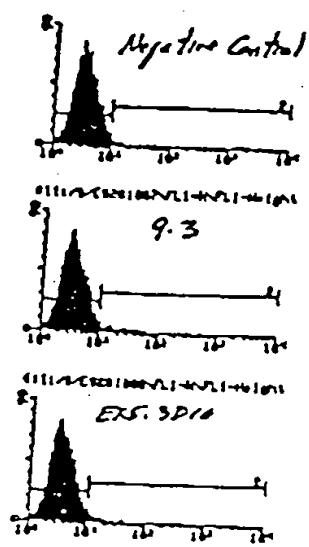


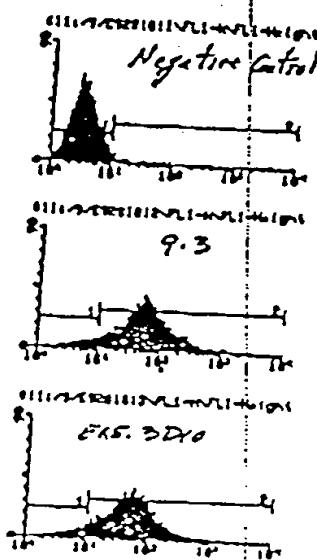
FIG. 5

mAb EX5.3D10

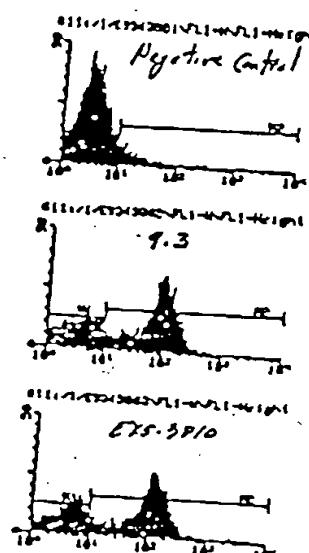
a. CHO-DG44 cells



b. CHO-hh cells



c. Unactivated PBLs



d. Jurkat #7 cells

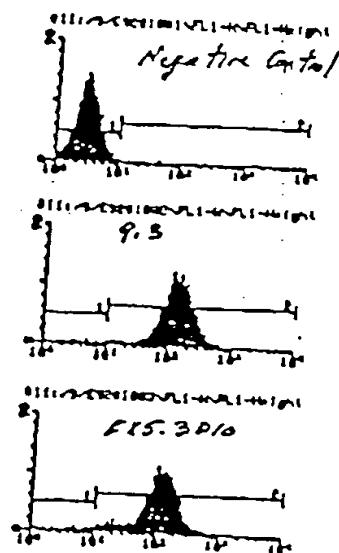
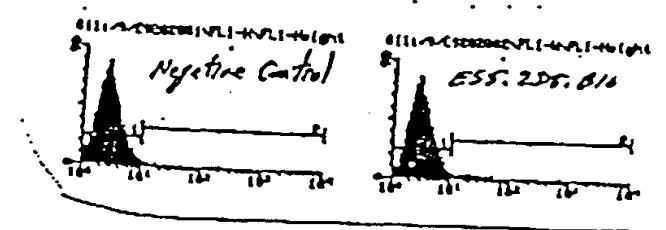


FIG. 6

mAb ES5.2D8

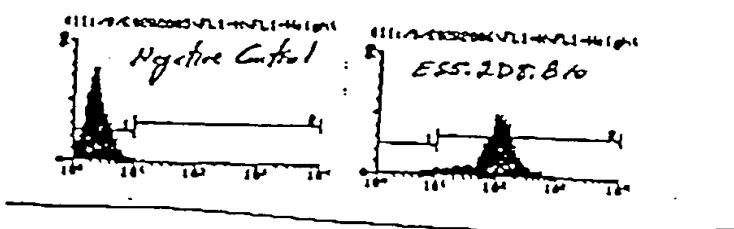
a.

CHO-DG44 cells



b.

CHO-105A cells



hPBLs:

c. Unactivated

d. PMA Activated

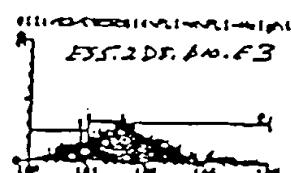
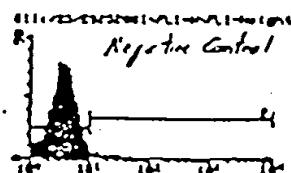


FIG. 7

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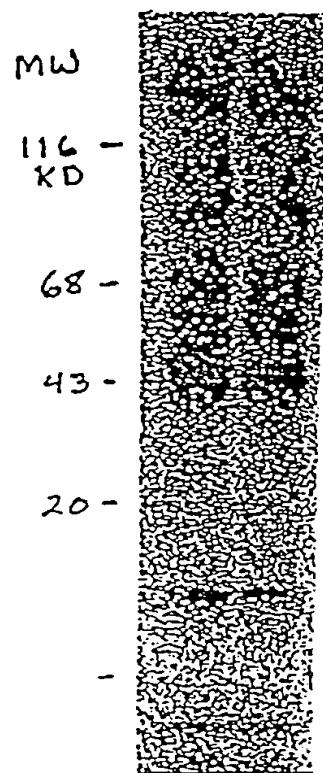


FIG. 8

# Use of Cell Sizing to Propagate CD4<sup>+</sup> T Cells

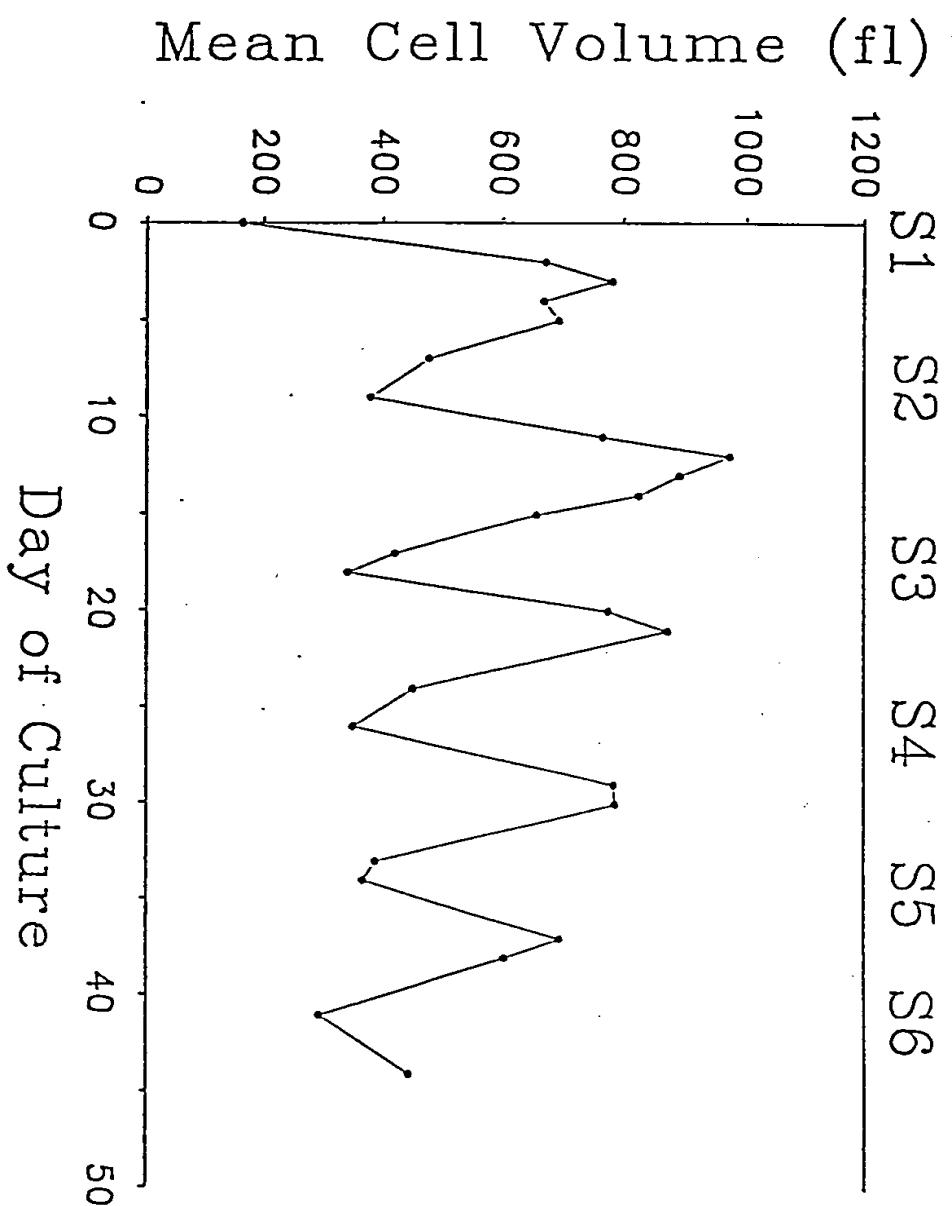


FIG. 9

Cells: CD28<sup>+</sup>/CD4<sup>+</sup>  
Stimulation: CD3SP + CD28

# Cyclic Expression of B $\gamma$ on CD4 $^{+}$ T Cells

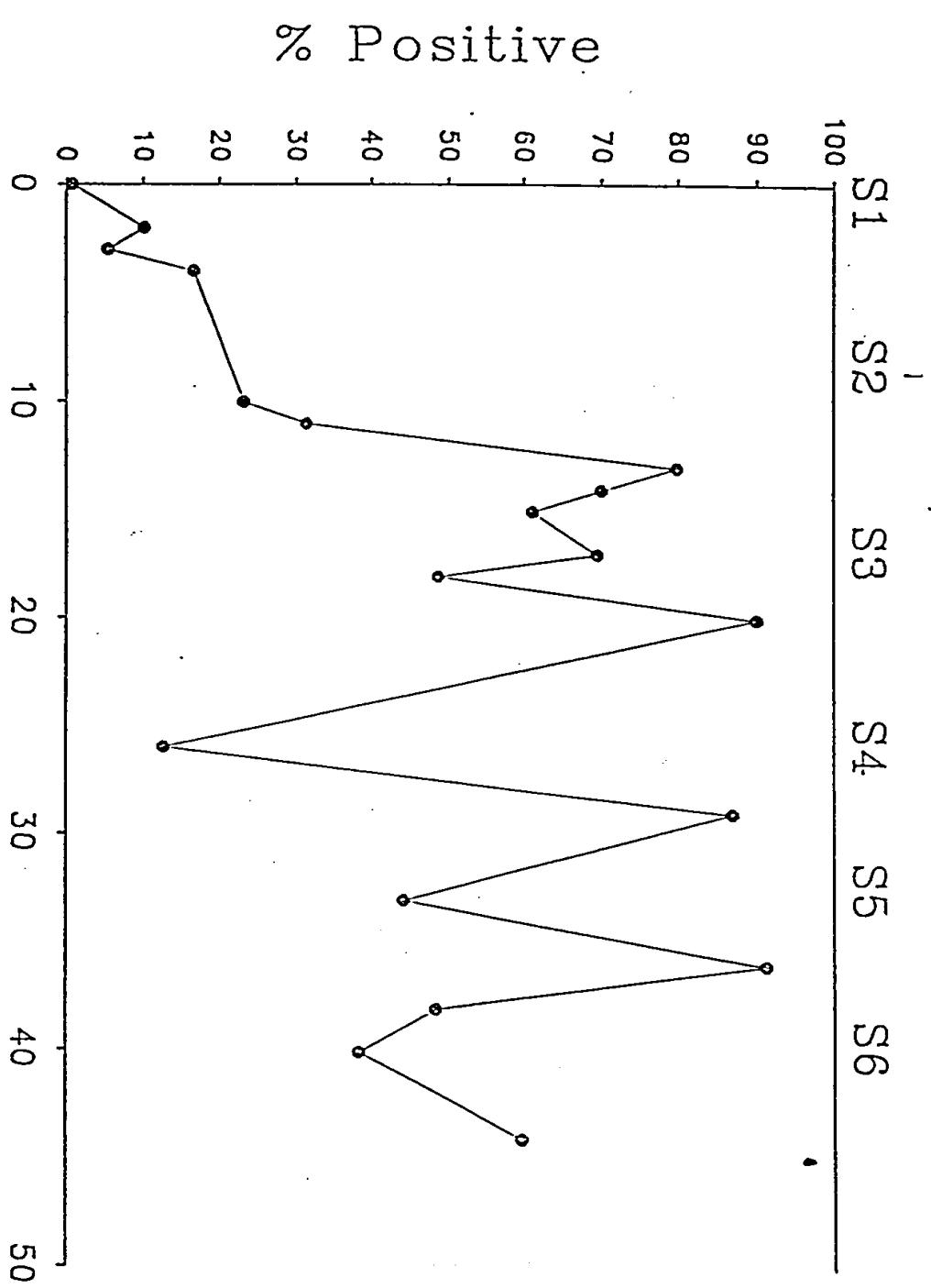


FIG. 10

Cells: CD4 $^{+}$ /CD28 $^{+}$

Day of Culture

Stimulation: CD3sp + CD28

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# Cytokine Accumulation in Culture Supernatants

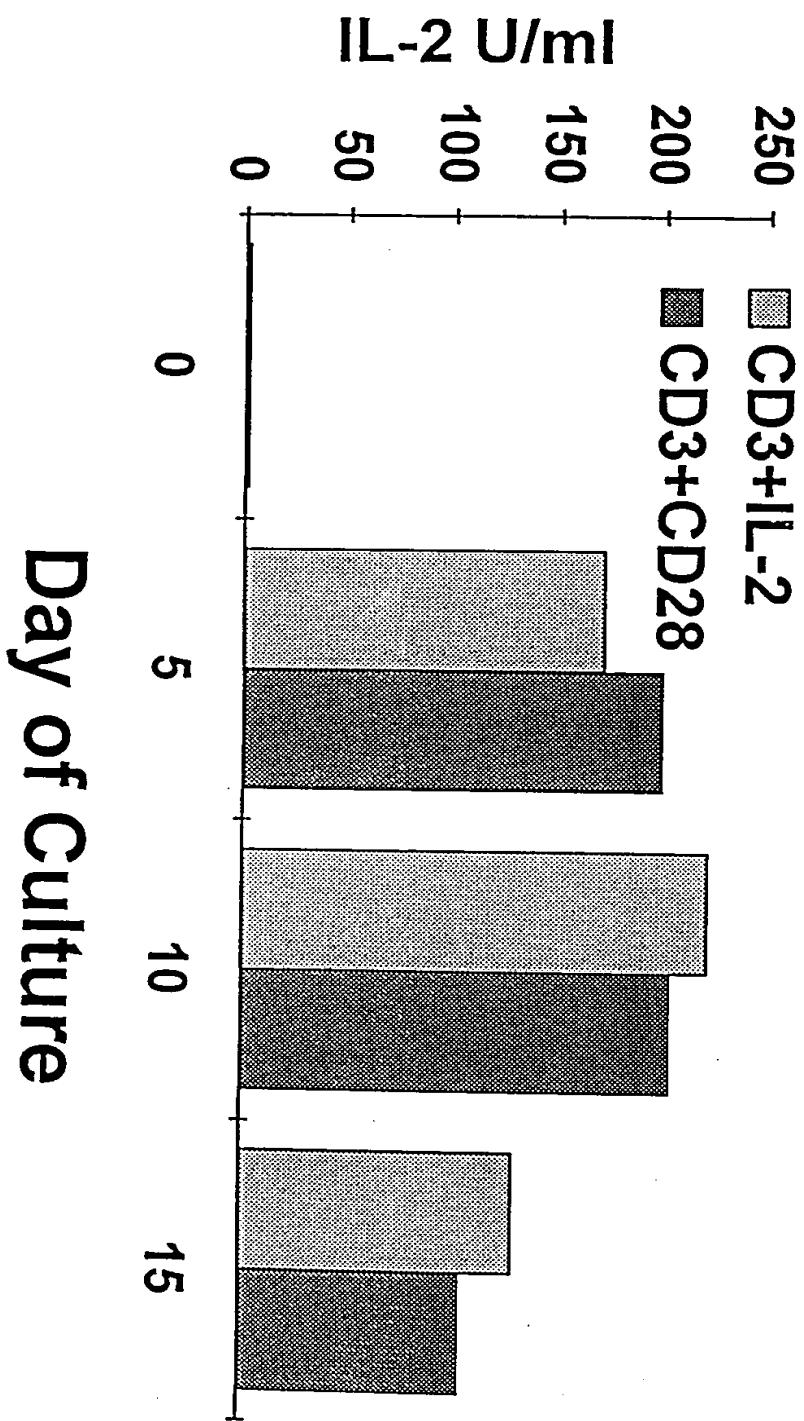


FIG. 11

# Cytokine Accumulation in Culture Supernatants

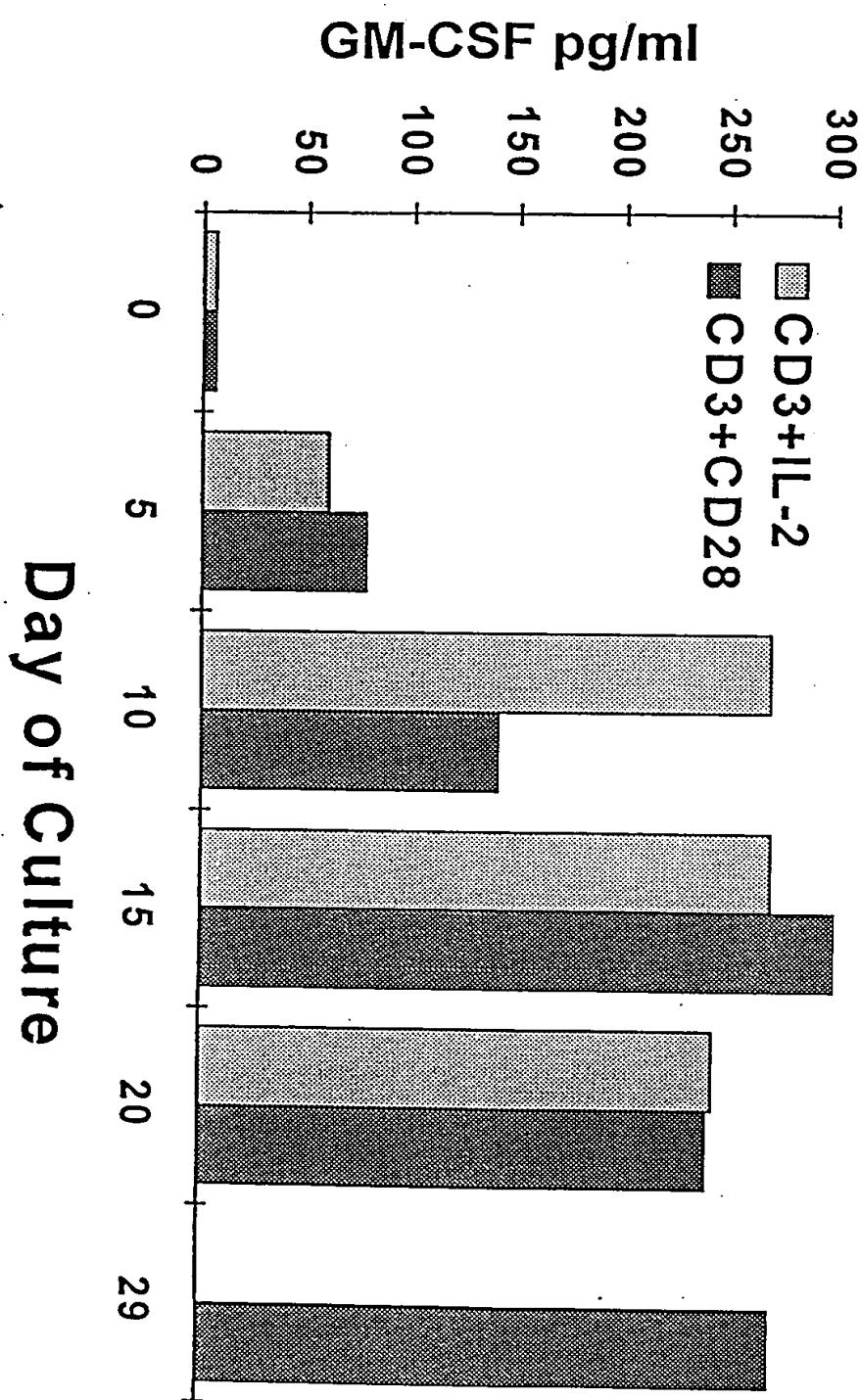


FIG. 12

# Cytokine Accumulation in Culture Supernatants

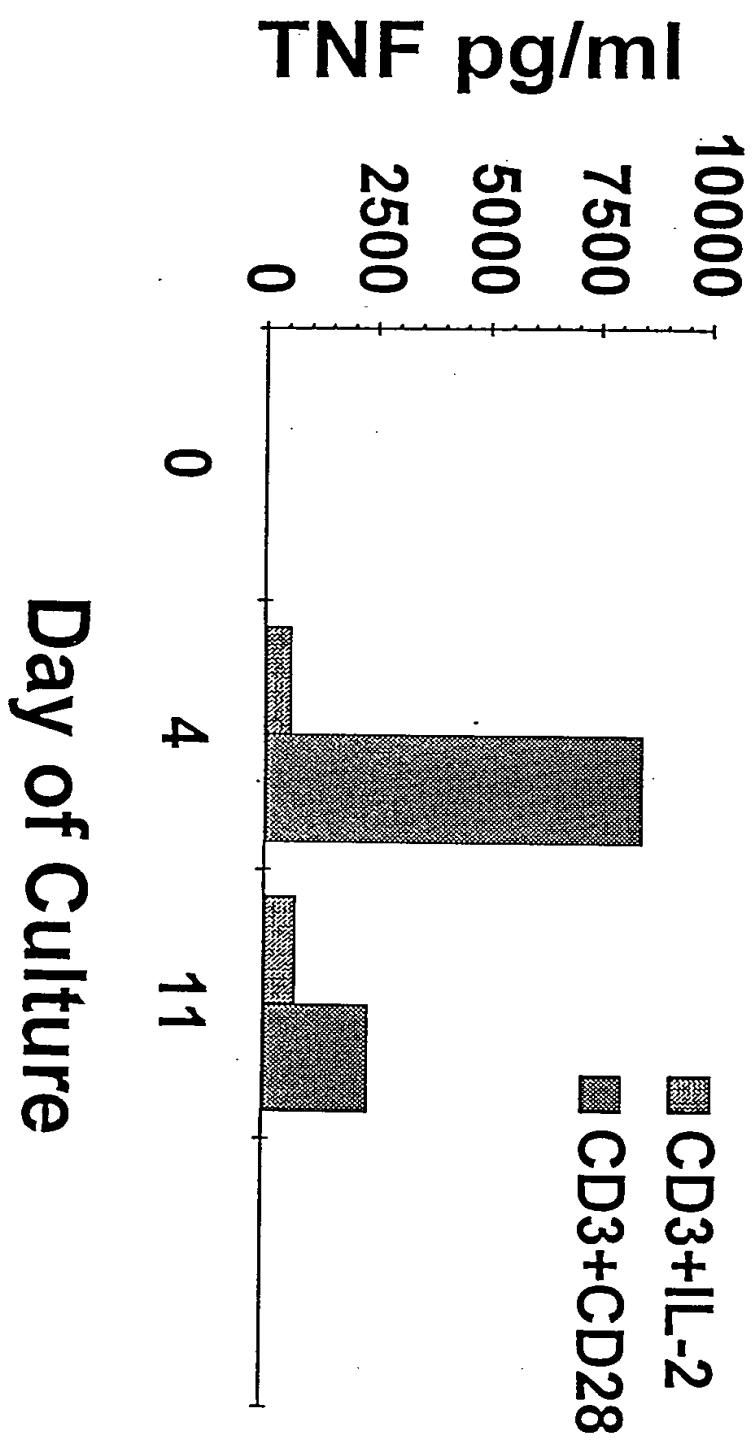


FIG. 13

# TCR Diversity

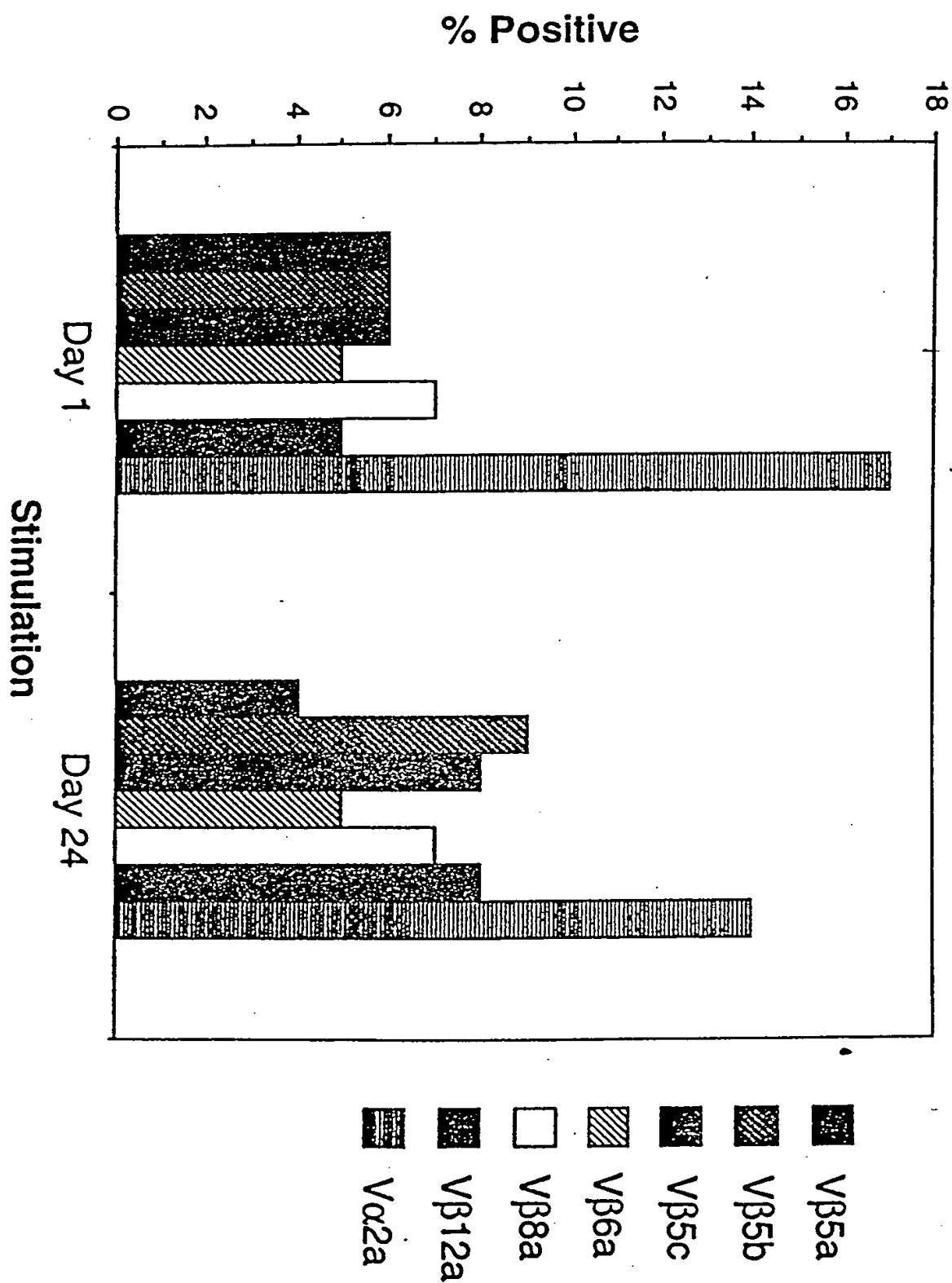


FIG. 14

(HIV-) Cell Surface Staining

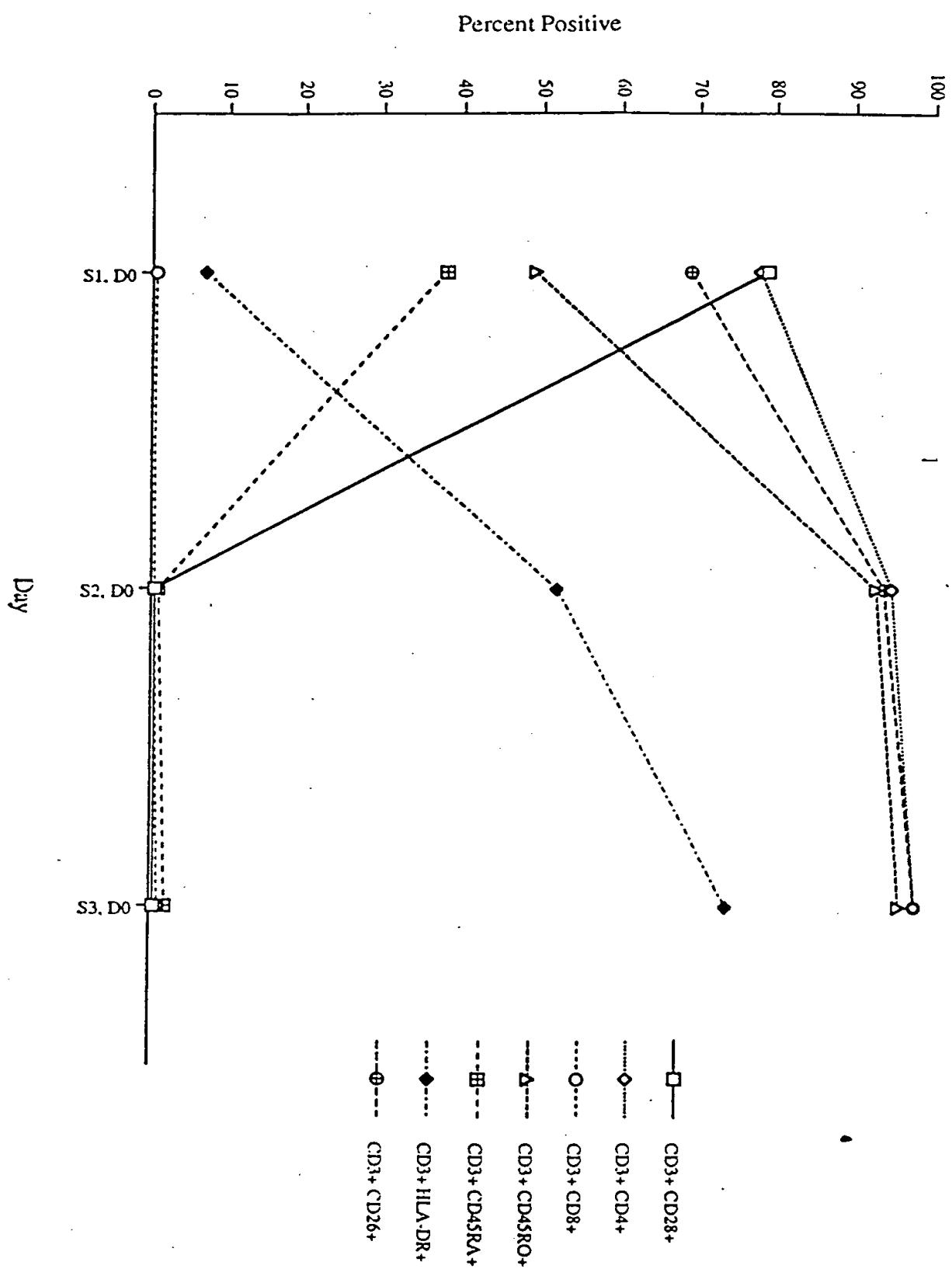
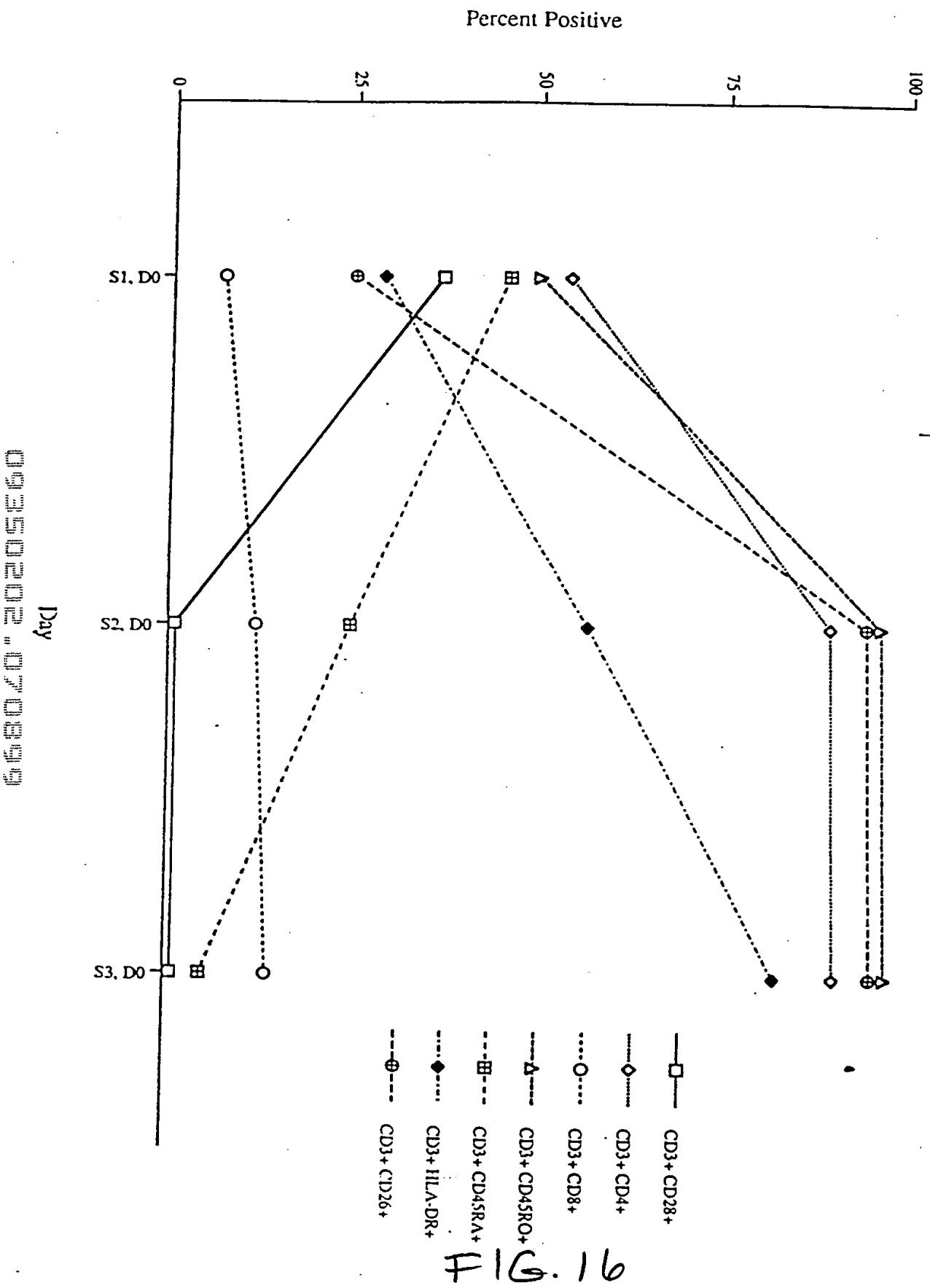
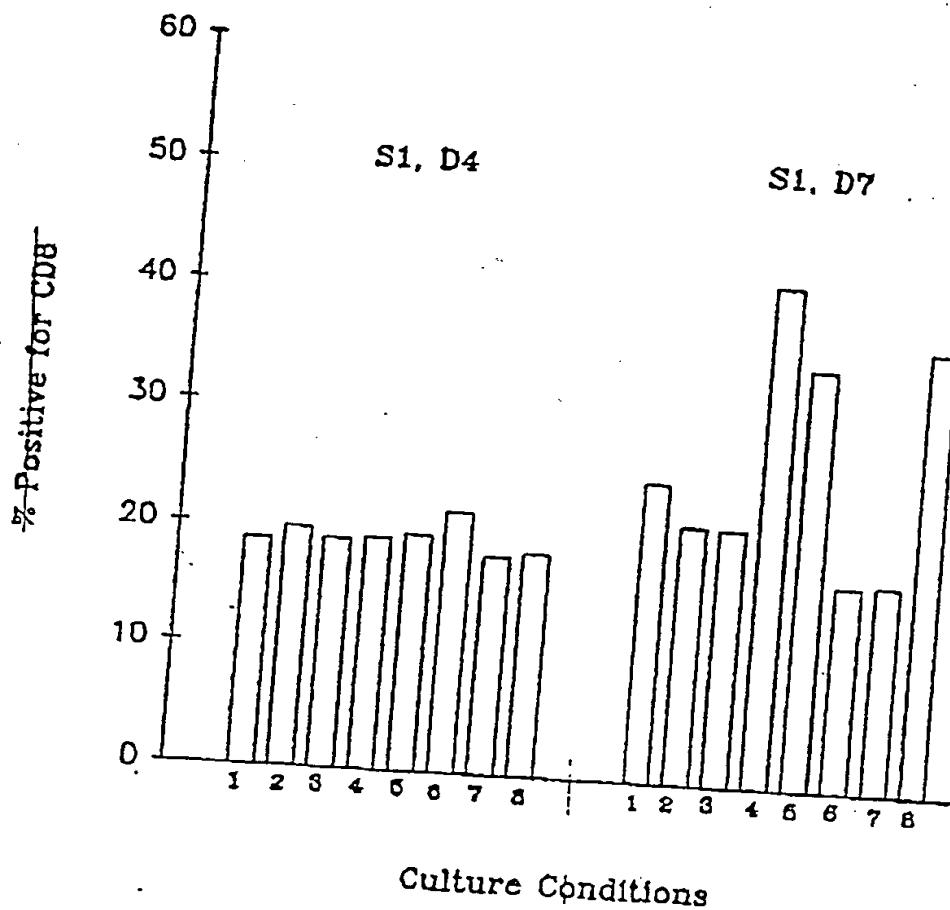


FIG. 15

## (HIV+) Cell Surface Staining



% Positive for CD8



- #1: G19-4sp + IL-2
- #2: G19-4sp + 9.3
- #3: G19-4sp + EX5.3D10
- #4: G19-4sp + ES4.2D8
- #5: G19-4sp + 7G11
- #6: G19-4sp + 9.3 + ES4.2D8
- #7: G19-4sp + 9.3 + 7G11
- #8: G19-4sp + ES4 + 7G11

FIG. 17

MOP cells transfected with plasmid encoding:

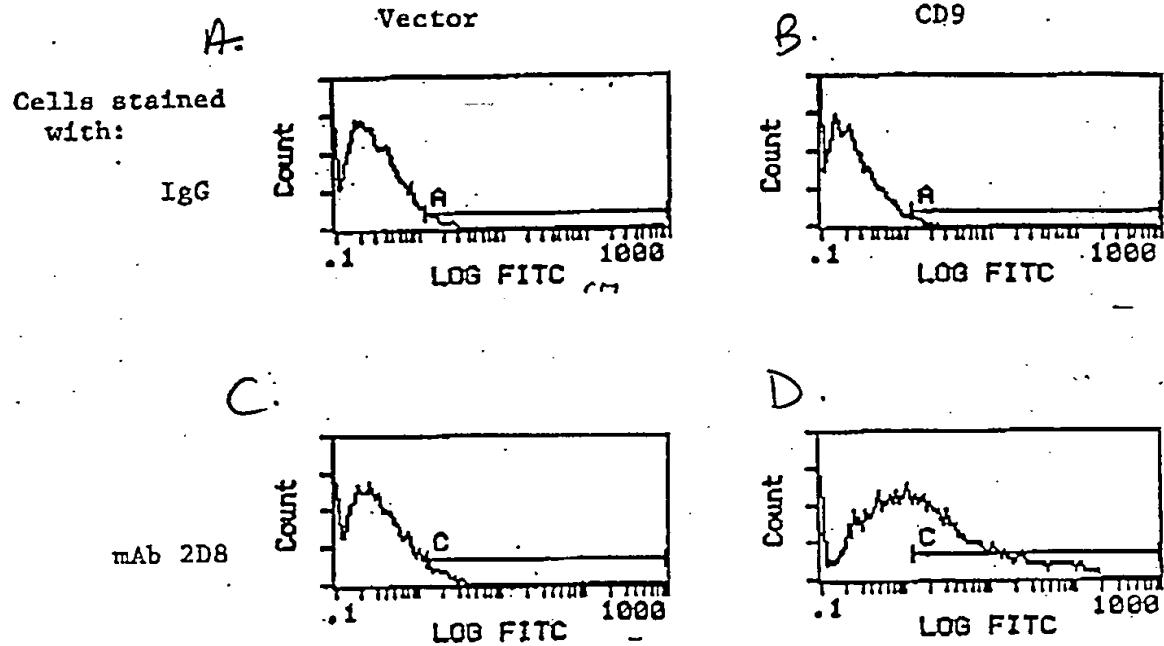


FIG. 18

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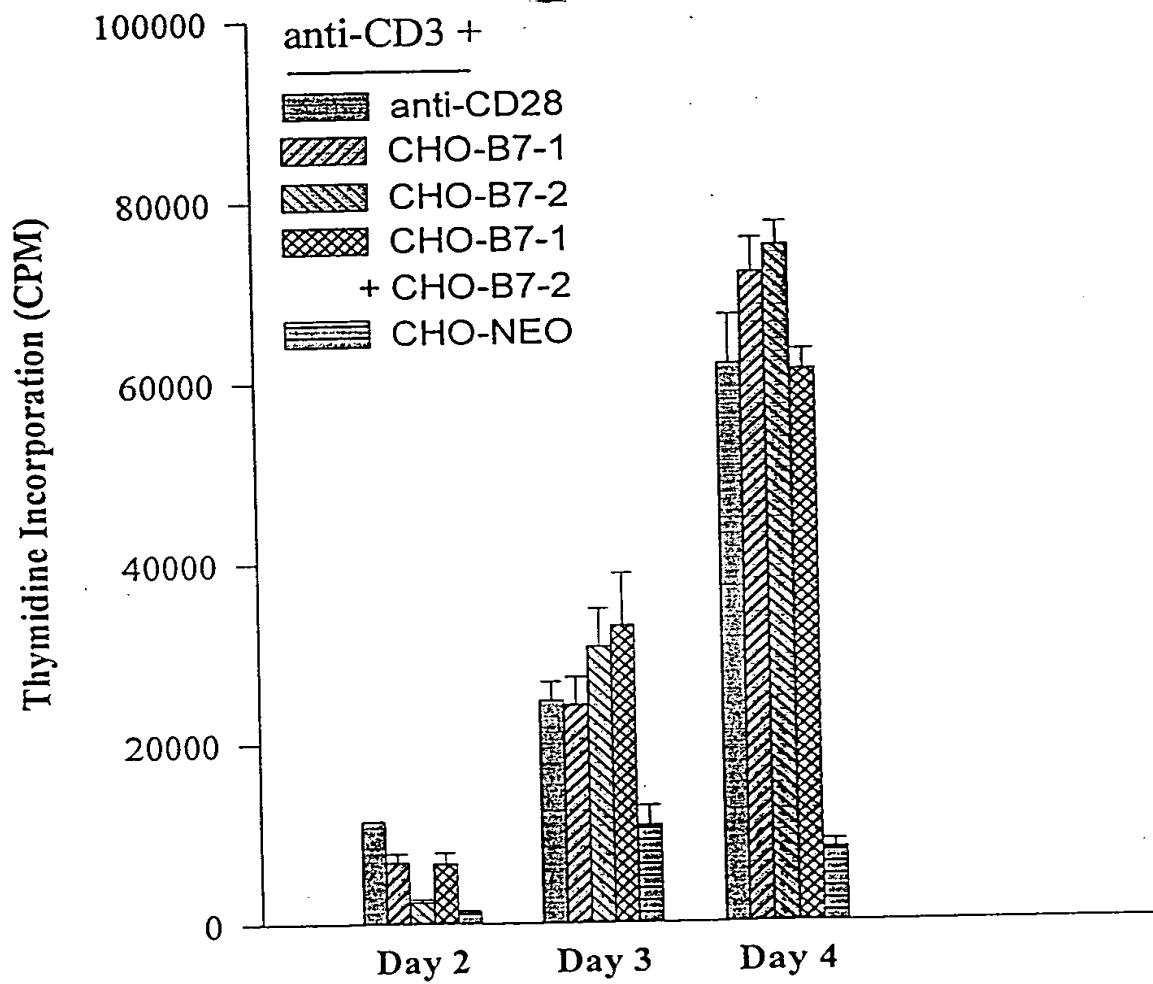


FIG. 19

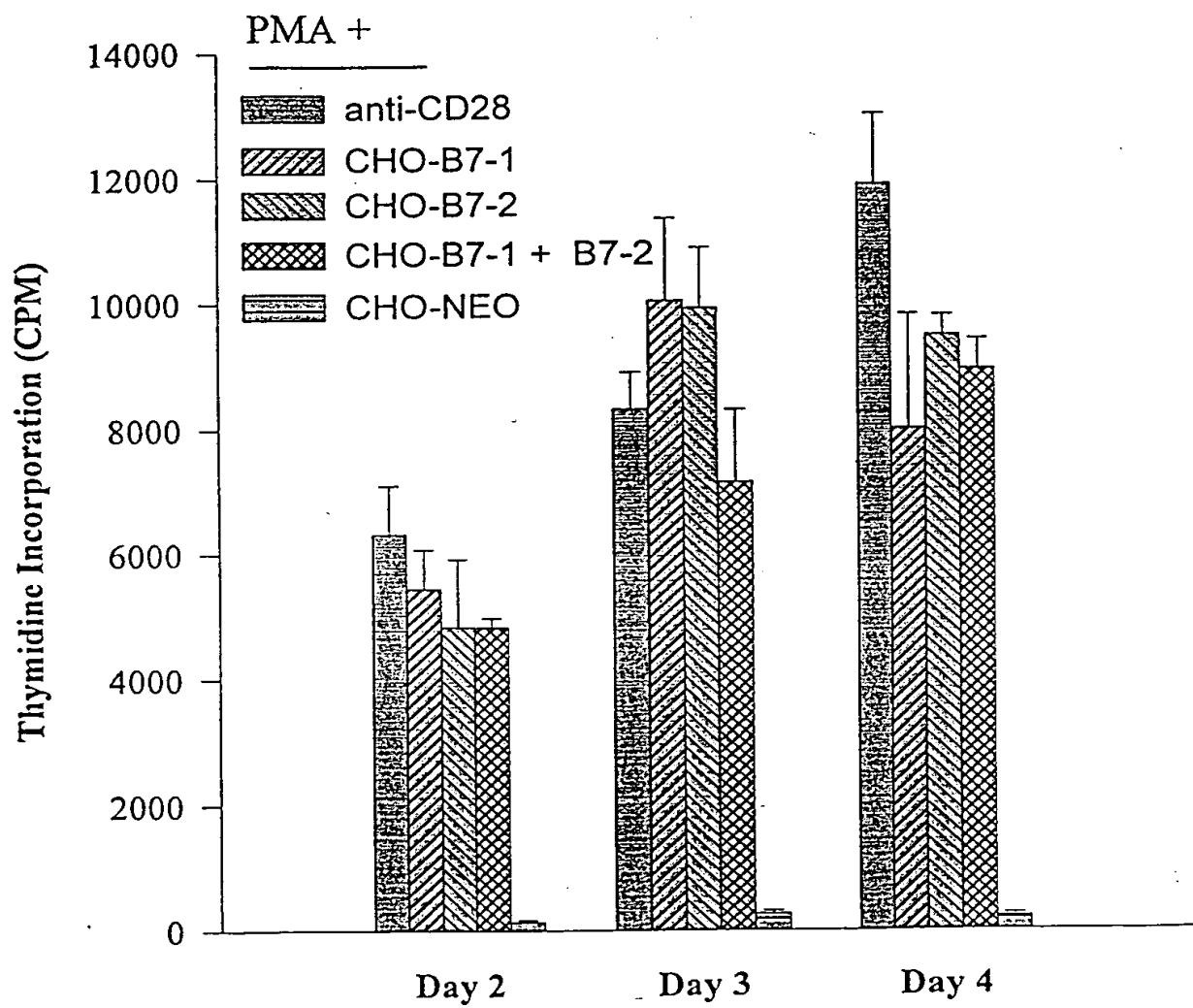


FIG. 20

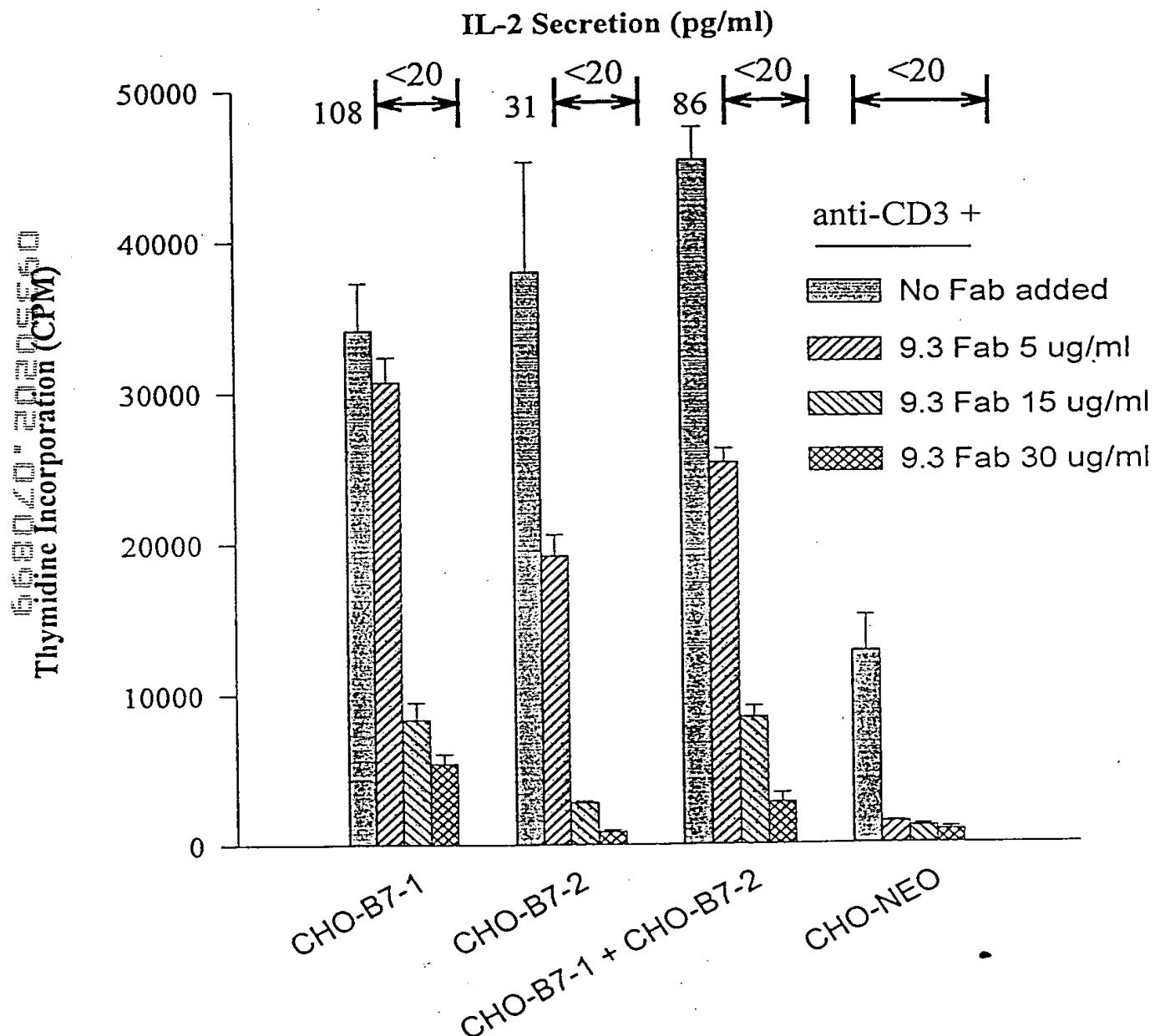


FIG. 21

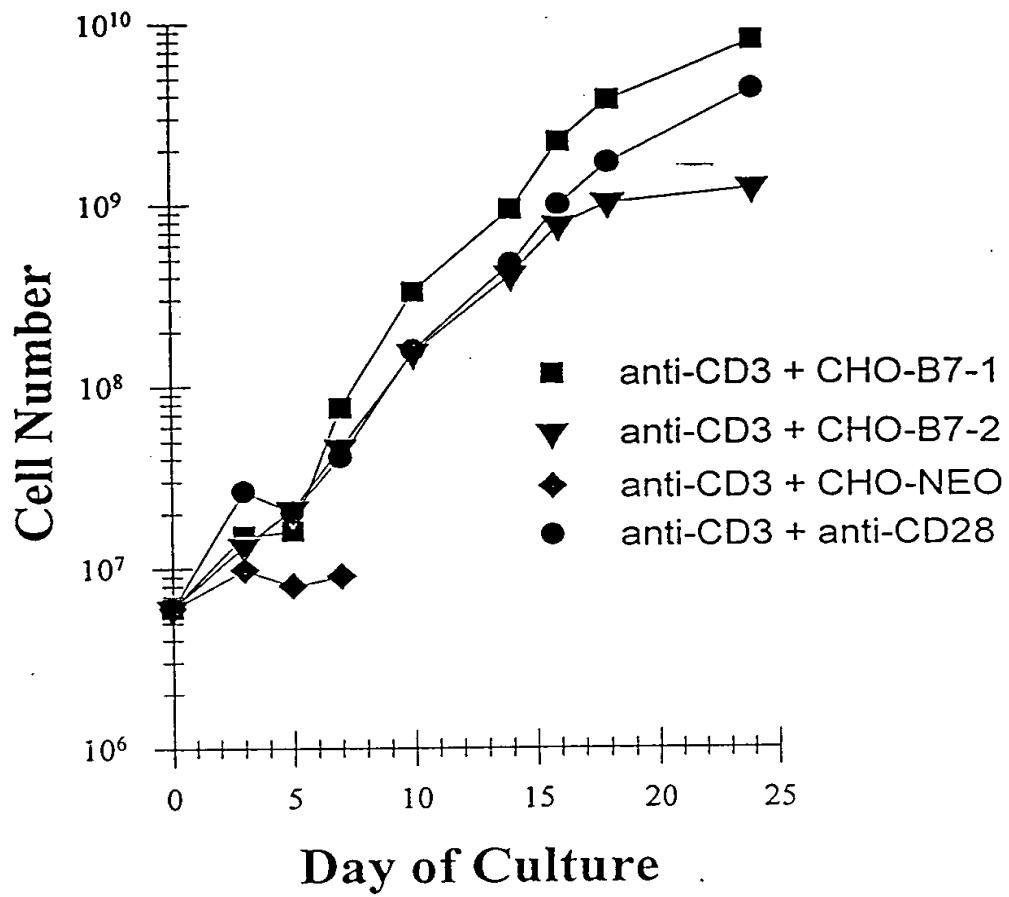
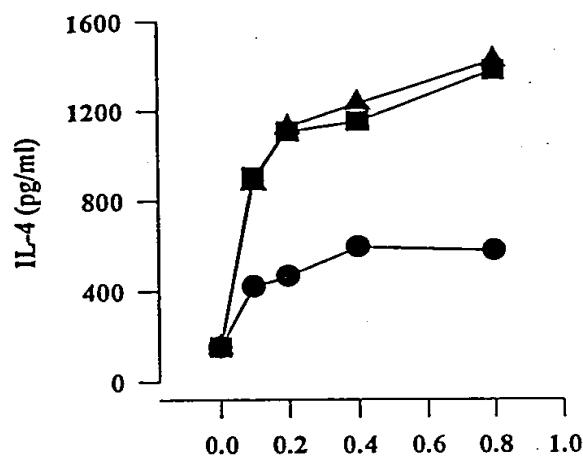
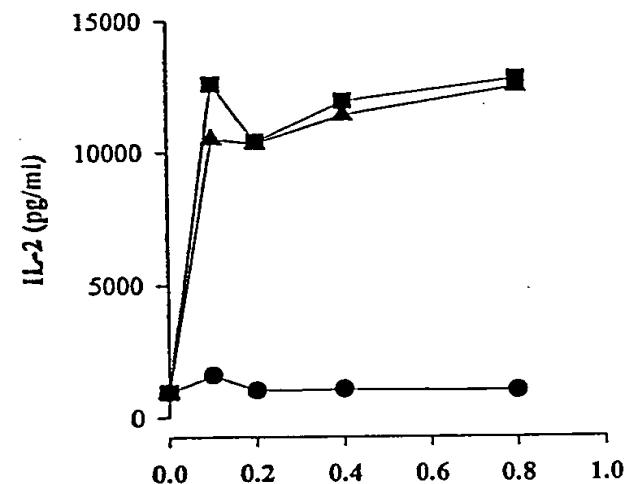
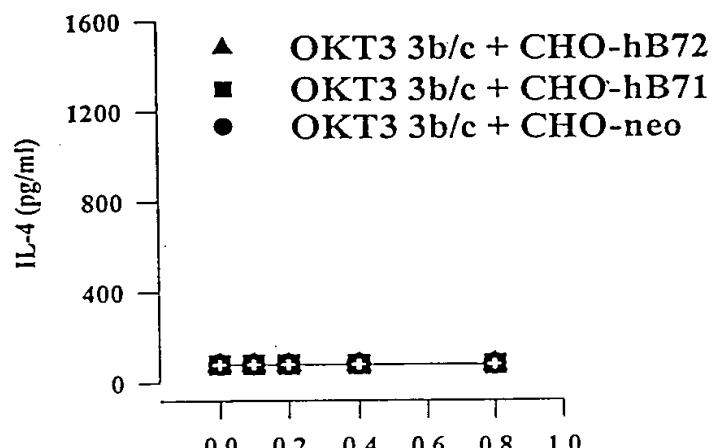
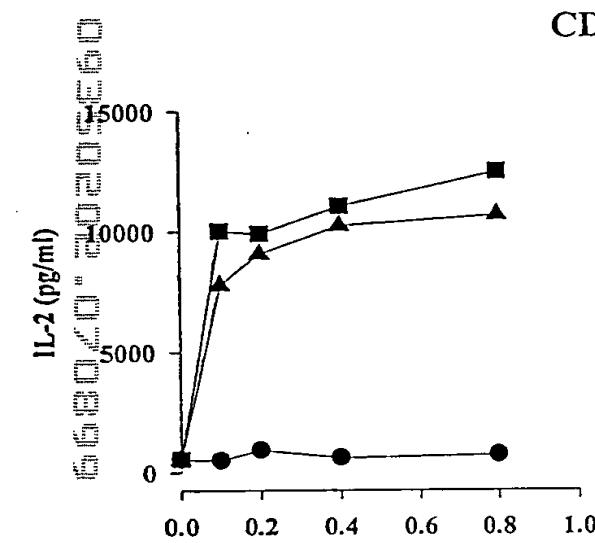


FIG. 22

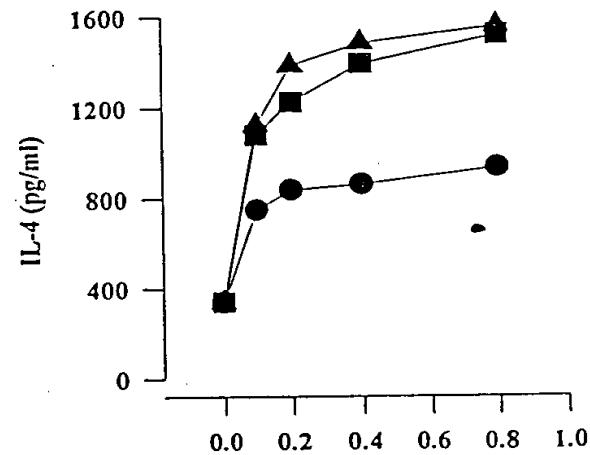
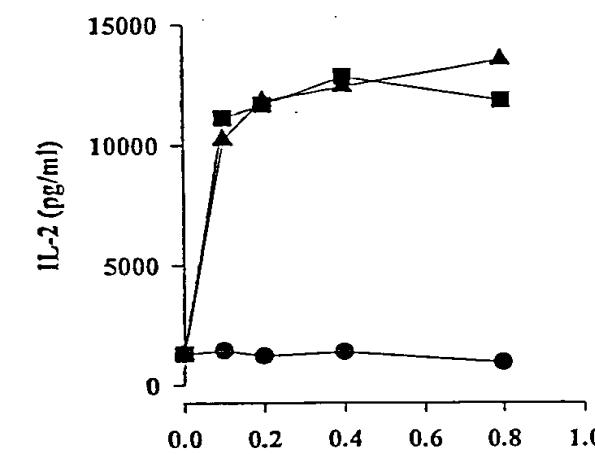
### CD4<sup>+</sup> T Cells



### CD4<sup>+</sup>/CD45RA<sup>+</sup> T Cells



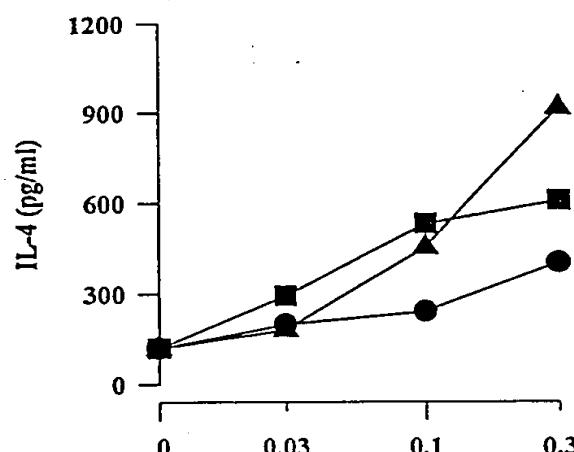
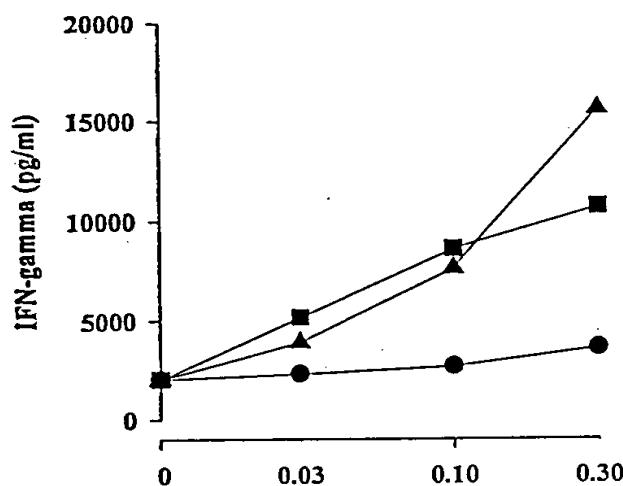
### CD4<sup>+</sup>/CD45RO<sup>+</sup> T Cells



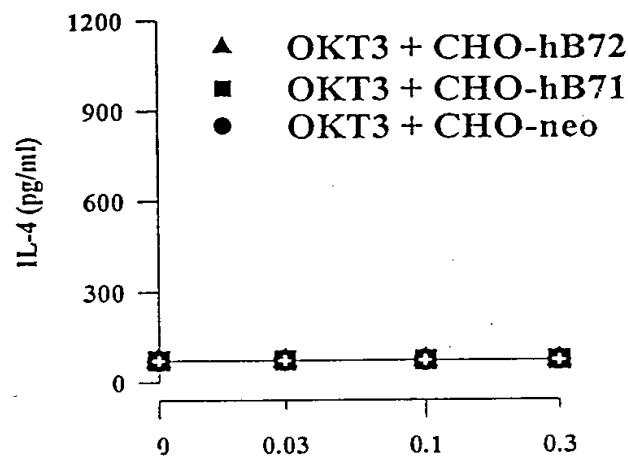
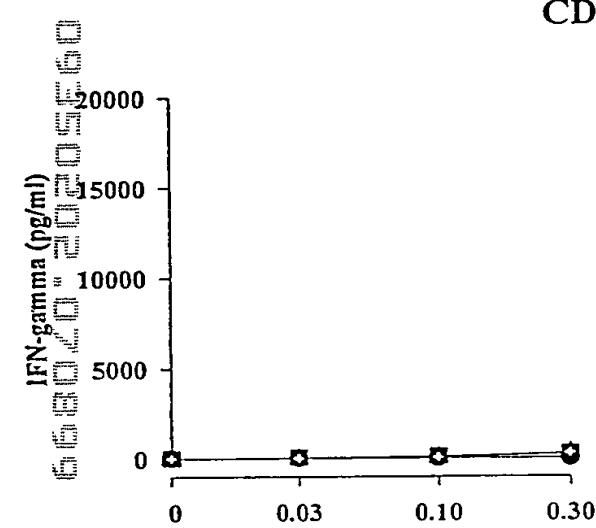
CHO Cells Per T Cell

FIG. 23

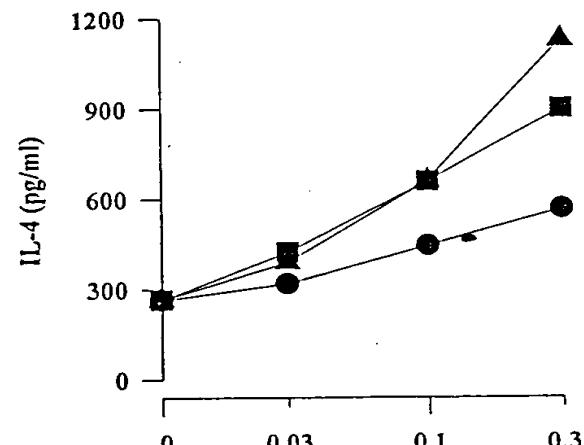
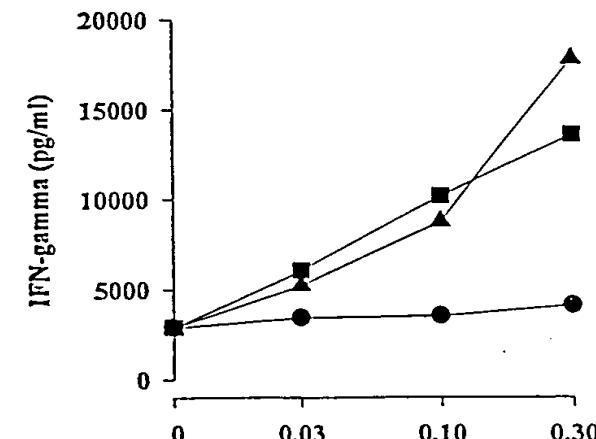
### CD4<sup>+</sup> T Cells



### CD4<sup>+</sup>/CD45RA+ T Cells



### CD4<sup>+</sup>/CD45RO+ T Cells



CHO Cells Per T Cell

FIG. 24

00000000000000000000000000000000

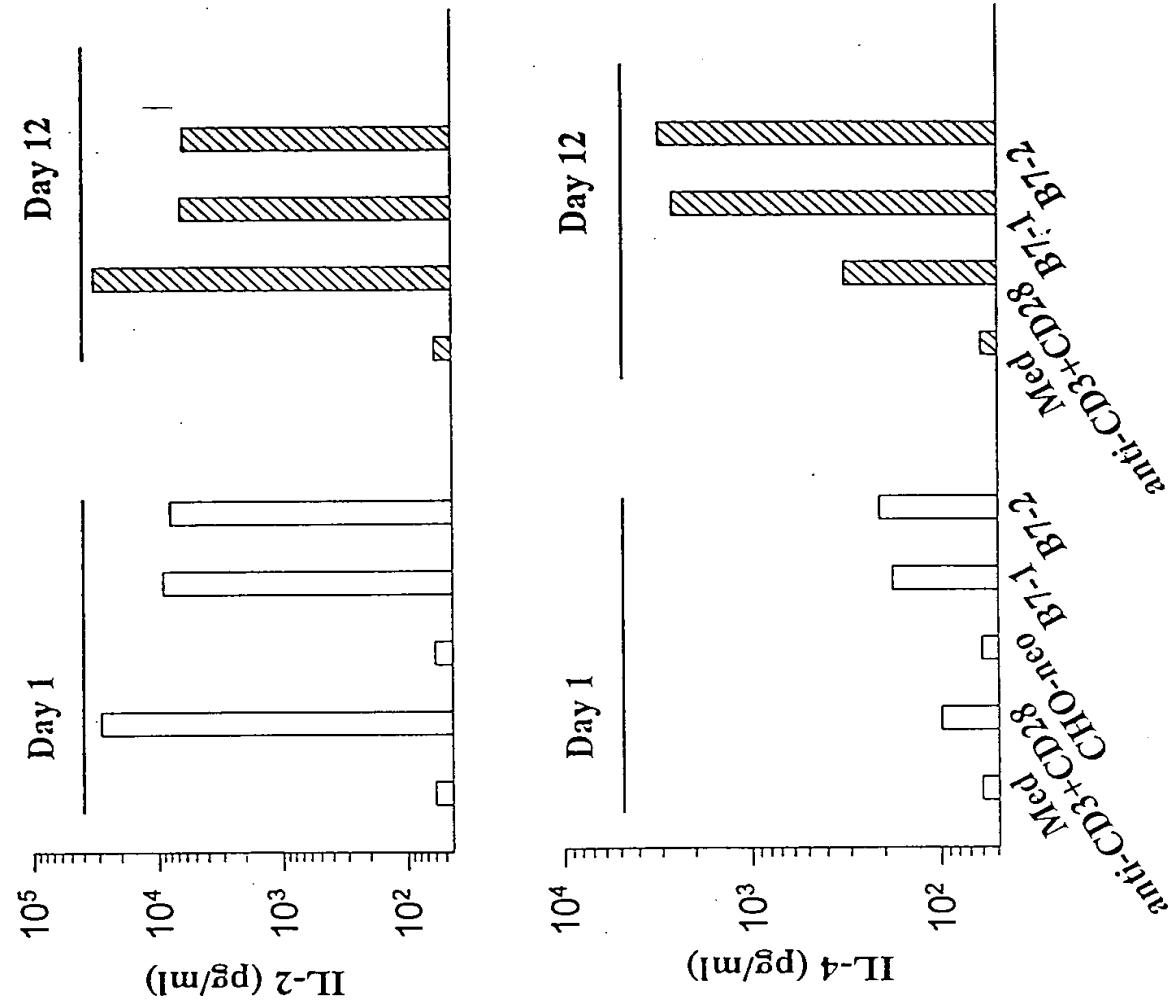


FIG. 25

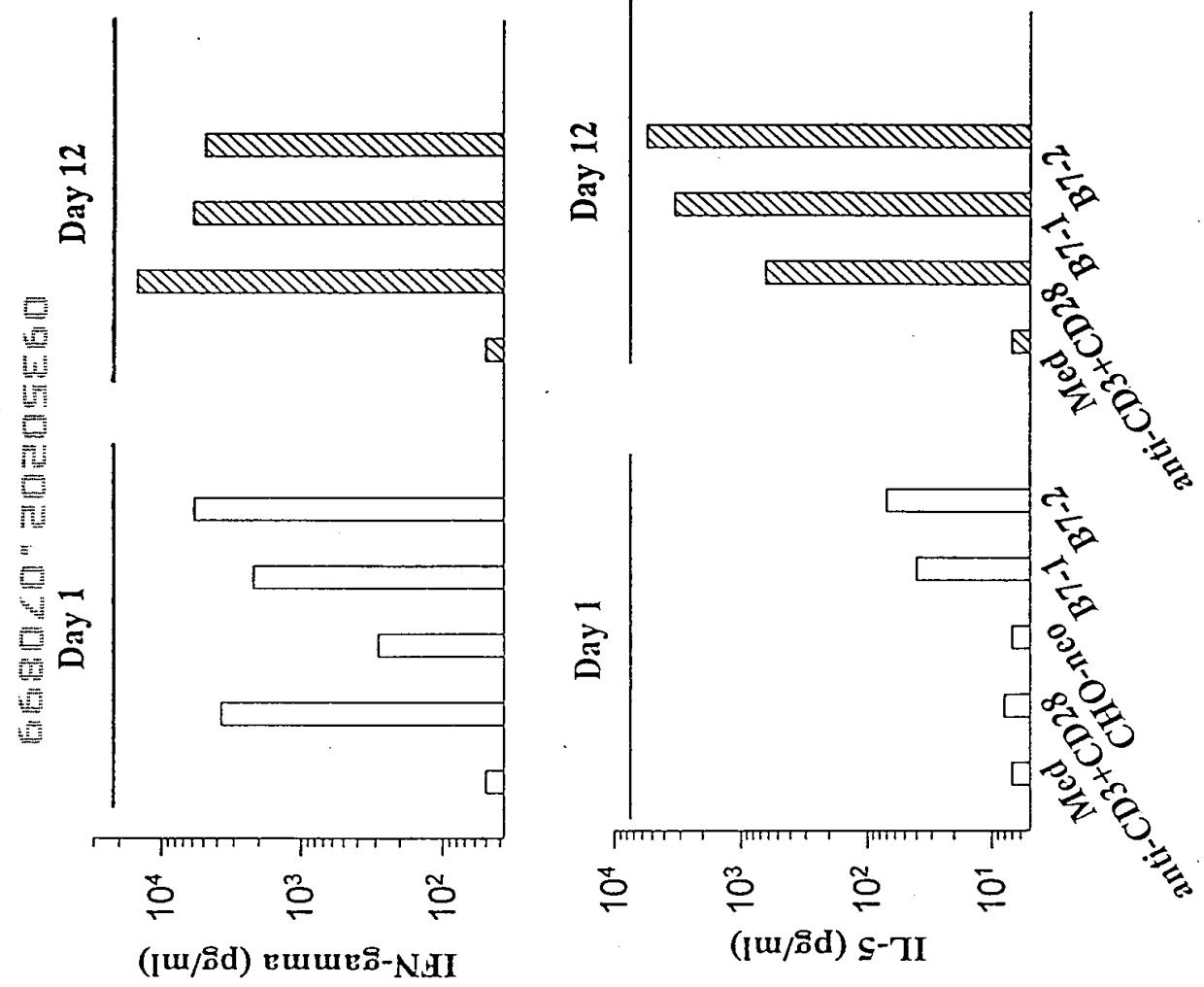


FIG. 24

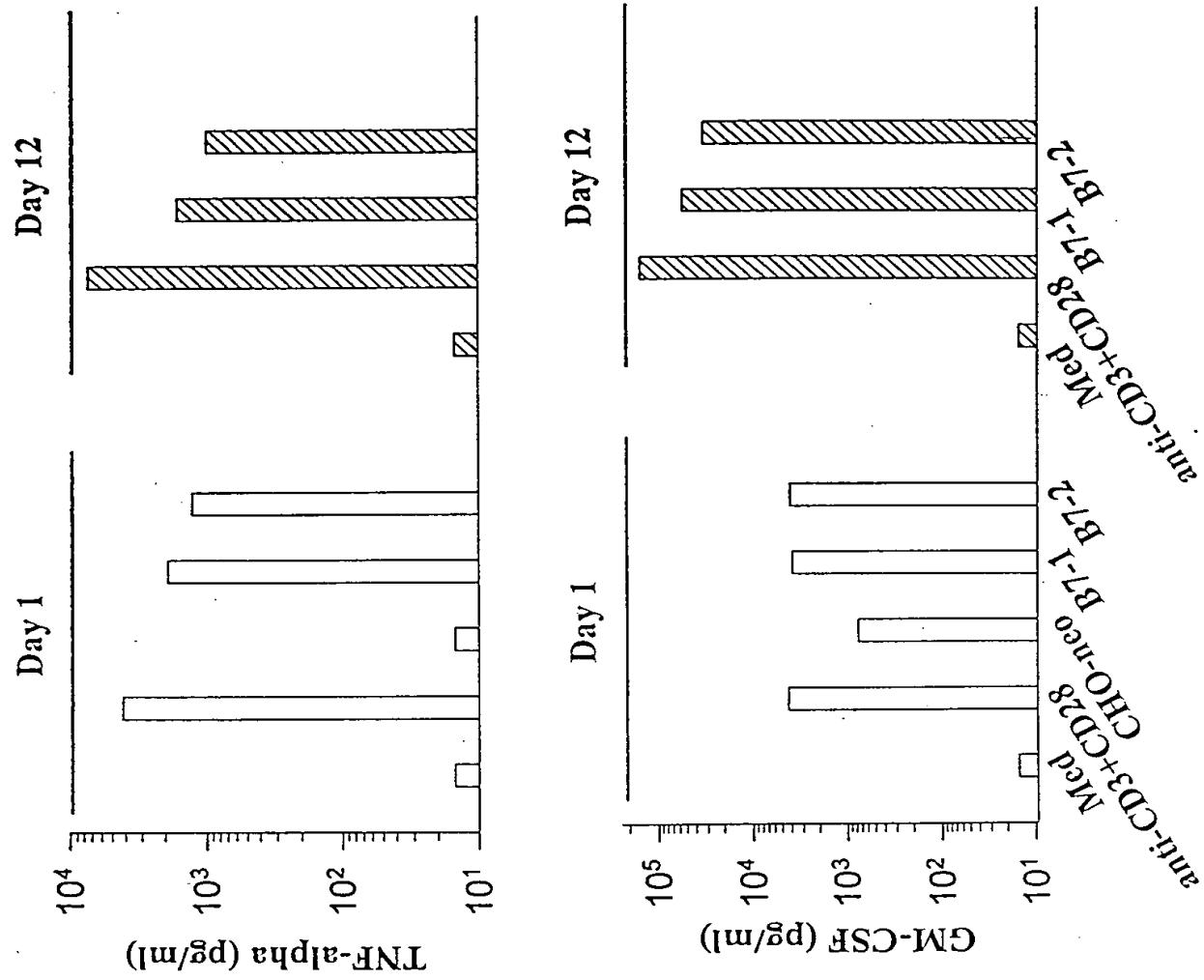


FIG. 27

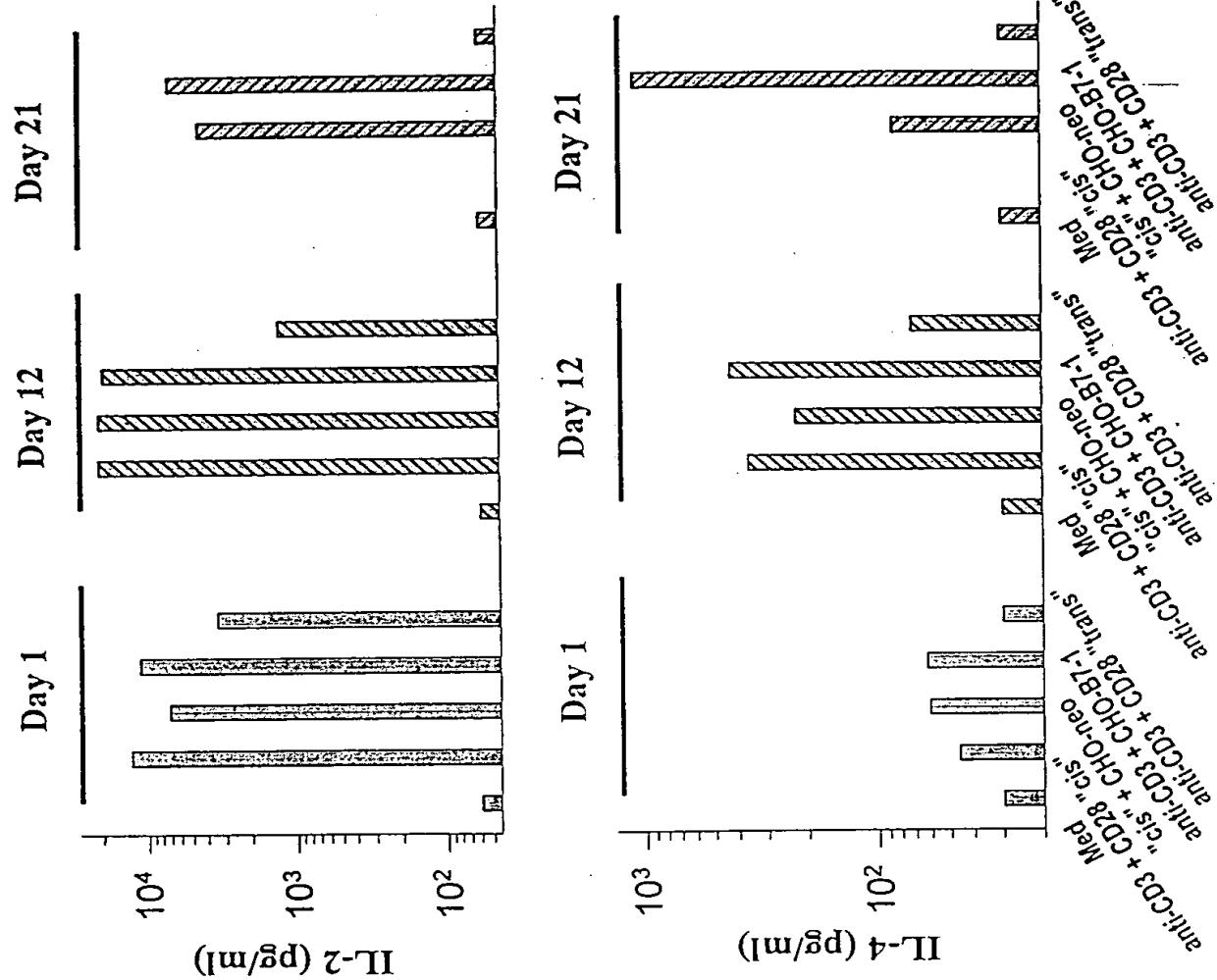


FIG. 28

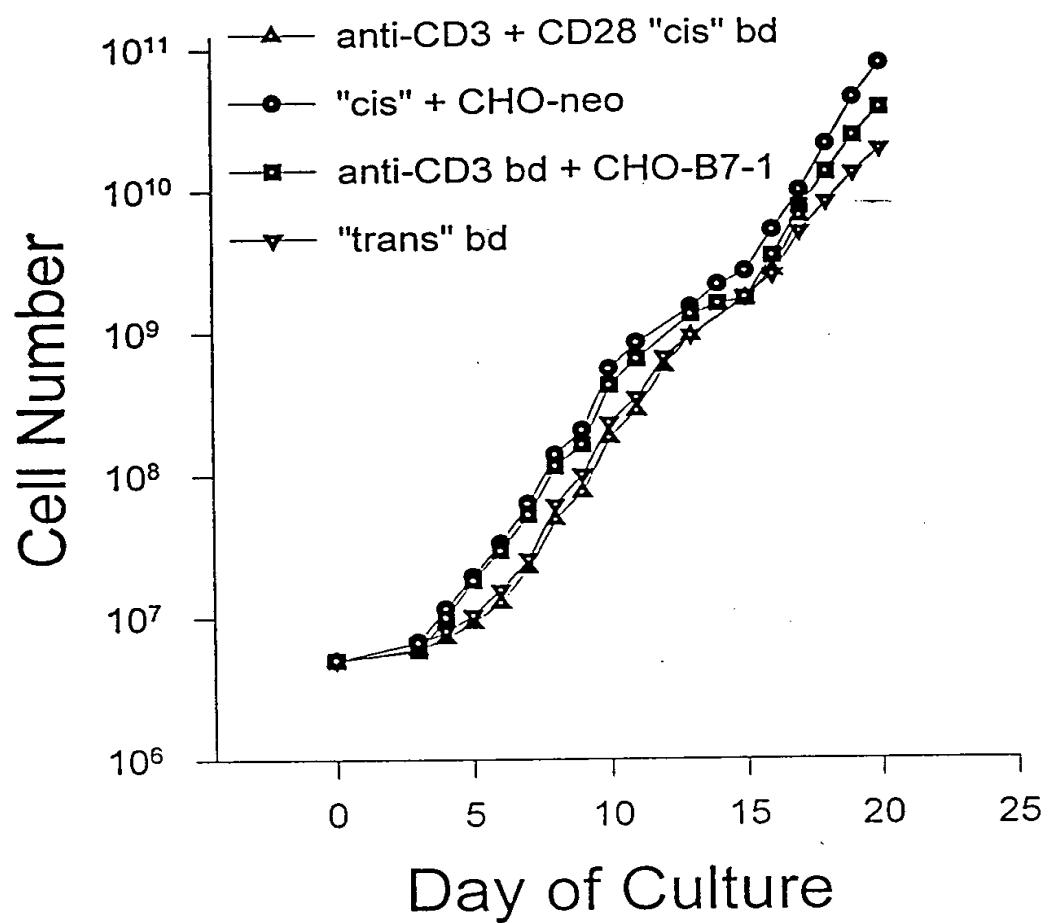


FIG. 29

668020205600

HIV P# 713814

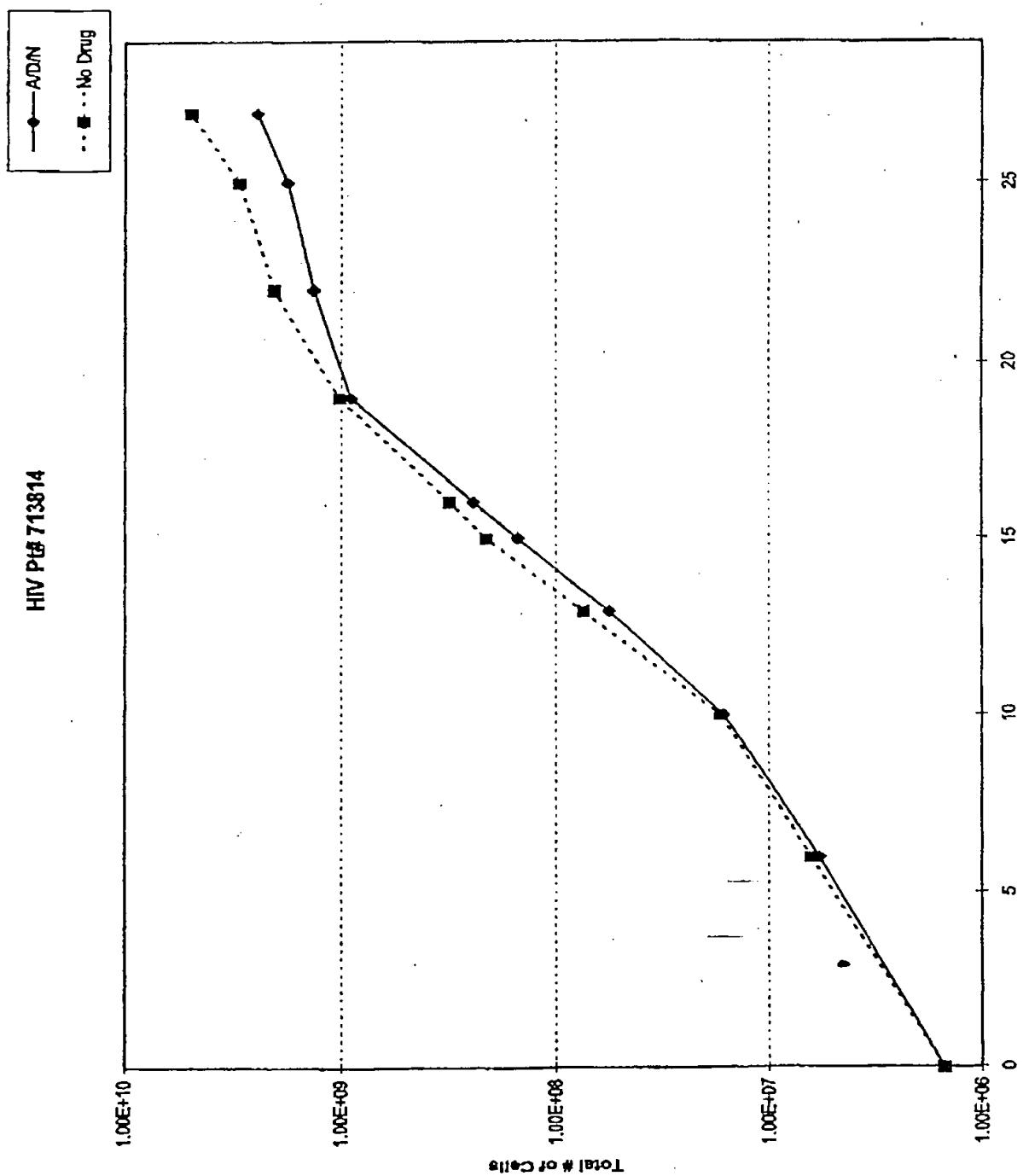


FIG. 30

FIG 10 " 20205E60

POPULATION DOUBLING

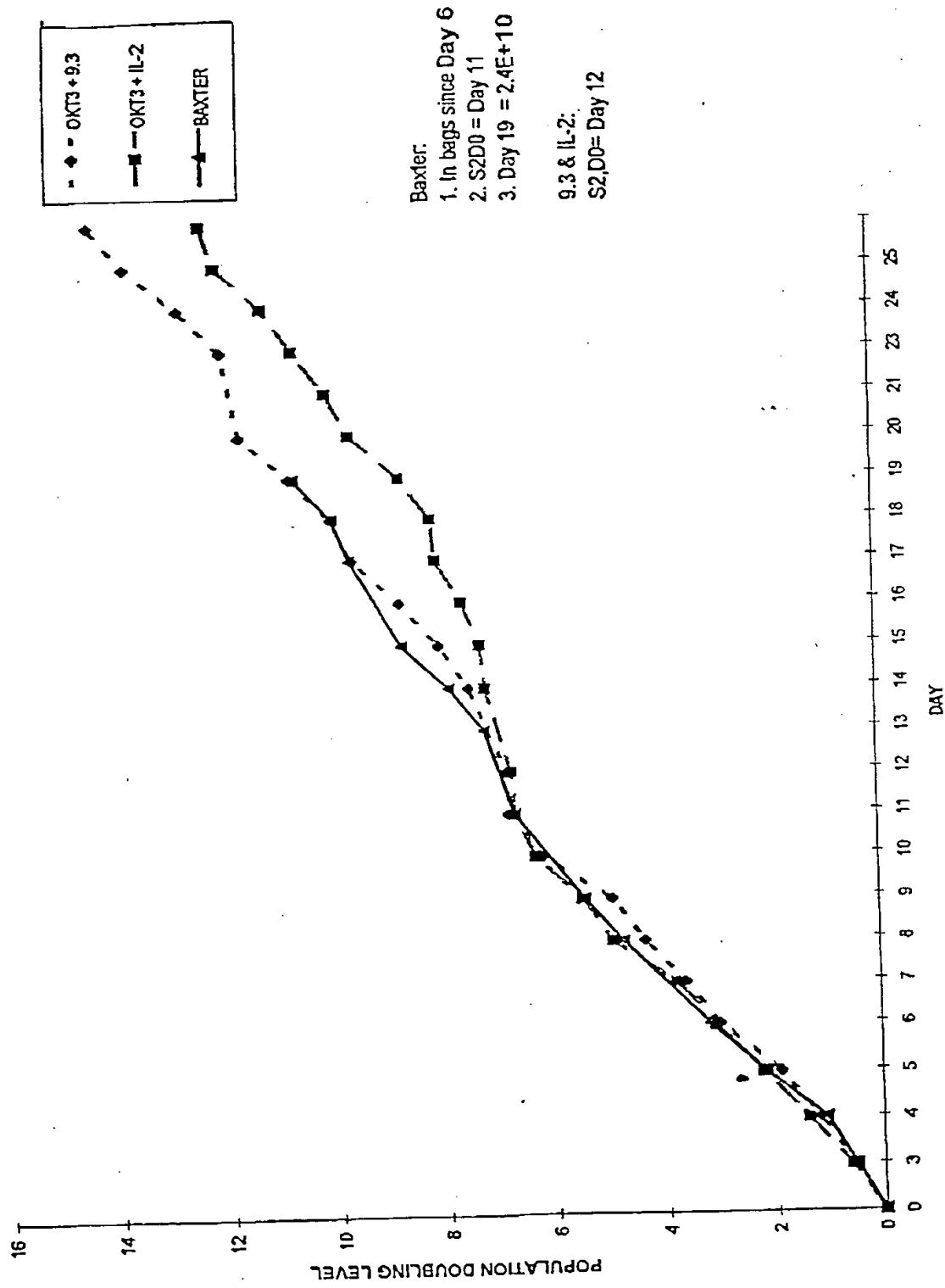


FIG. 31